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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|------------------------|---------------------|------------------|
| 09/356,845 | 07/19/1999 | JOHN DAVID KAEWELL JR. | I-1-50.5US | 8408 |

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EXAMINER

BOCURE, TESFALDET

ART UNIT

PAPER NUMBER

2631

DATE MAILED: 05/21/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/356,845

Applicant(s)

KAEWELL JR. ET AL.

Examiner

Tesfaldet Bocure

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 11,13-23,25-27 and 29-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 11,13-23,25-27 and 29-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11,13,14 and 32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 11: It has been claimed in claim 11, lines 17-18, that the "TX information originated from a secondary station," while in lines 10-11 "the TX information" is transmitted from the primary station, which is confusing. The same is true with "the synchronization information from the primary station" with that, "the synchronization information from the base station of the " in lines 21-22.

Claim 13,14 and32: Claims 13 and 14 are inherently rejected as being dependent on the rejected base claims.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for

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patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

3. Claims 11,13-23,25-27 and 29-32 are rejected under 35 U.S. C. 102(b) as being anticipated by **Schlosser et al.** (US patent number 3,879,581, of a record).

Schlosser teaches a communication system having a repeater station (100) (claimed primary) for communicating with a plurality of subscriber stations (not shown, see subscriber line in figure 1) and data terminals (110), wherein the repeater terminal comprising means and steps for: receiving an information signal from one of the subscriber stations using an up-link channel and slot through a data terminal (110); detecting the received up-link signal from the terminal and the sync signal and assigning a sync. signal in a corresponding time slot for transmitting to the receiving end on the assigned time slot and frequency (2a-2f and claims 1-6) as in claims 11,13,15,16,19,22,26 and 30. The repeater unit modifies the received up-link signals to be transmitted and assigns the down-link time slot without the knowledge of the data terminals and subscriber units, and therefore it is transparent to both the subscriber and the data terminals. Further to claims 14,17 and 20, the data terminals and the subscriber station (not shown) are outside the operating range.

The time slots in figures 2a-2f having a corresponding up-link and down-link frequencies (800 channels) as in claims 23,27 and 30, and the sync. information and control field transmitted by the spacecraft 100 will be used by the data terminals to be synchronized as in claim 32..

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The repeater unit (100) modifies the received signal to be transmitted to the receiving end, therefore, reads on the claimed equalizing the received signal before retransmitting as in claims 25,29 and 31.

The wideband downlink (121) includes a synchronization and control filed, which is utilized by the spacecraft to interrogate and call the date terminals in order to set up a circuit connection, to provide time reference for uplink synchronization of the terminals (see col. 4, lines 41-59), reads on the newly claimed secondary station aligning its frame timing according to the received signal in claims 11,15 and 19.

The repeater unit is a radio transceiver reads on the claimed transmitter and receiver embedded on radio as in claims 18 and 21.

Response to Amendment

4. In response to Applicant's argument that:

The present invention has a base station transmitting synchronization information to primary/telecommunication station so that the station can synchronize to the base station. The primary/telecommunication station transmits synchronization information to a secondary station so that the secondary station can synchronize to the primary/telecommunication station. Ass a result , the secondary station is effectively synchronized to the synchronization information transmitted by the base station.---

First, Examiner would like to point out that the space craft 100 (satellite) may employ to perform similar functions to those performed by the base station in a terrestrial radiotelephone system, for example, in area where population is sparsely distributed over a large area or rugged

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topography tends to make lindline telephone or terrestrial telephone infrastructure technically or economically impossible. See for example, US patent number 5,901,185.

As to the above argument, the spacecraft 100 transmits a downlink frame, a synchronization and control field, to the data terminals. See figure 2d-2f.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

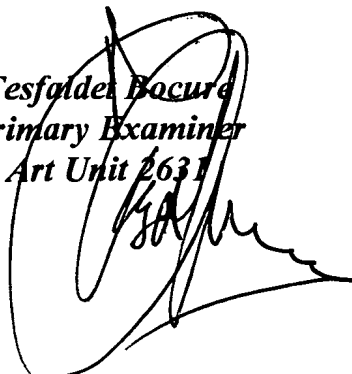
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to T.Bocure whose telephone number is (703) 305-4735. The examiner can normally be reached on Monday through Thursday the first week of a bi-week and Monday through Friday the second week of a bi-week from 7:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham, can be reached on (703) 305- 4378. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-4743 or (703) 305-3988 .

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Tesfaldet Bocure
Primary Examiner
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A large, stylized handwritten signature in black ink, appearing to read 'T. Bocure', is written over the typed name and title.

T.Bocure

May 20, 2002